

ABSTRACT OF THE DISCLOSURE

The present invention discloses method for manufacturing capacitor of semiconductor device wherein a bonding layer is exposed via etch-back process without using a contact hole mask. In accordance with the method of the present invention, an interlayer insulating film, a bonding layer and a hard mask layer are sequentially formed on a semiconductor substrate. The hard mask layer, the bonding layer and the interlayer insulating film are then etched to form a storage electrode contact hole. The storage electrode contact hole is partially filled to form a storage electrode contact plug and the remaining portion is filled with a barrier metal layer pattern. The hard mask layer is then removed and a storage electrode contacting the barrier metal layer pattern is then formed on the bonding layer.